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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/566,055	03/13/2007	Carsten Detlefs	056982/66	2080	
31013 7590 KRAMER LEVIN NAFTALIS & FRANKEL LLP INTELLECTUAL PROPERTY DEPARTMENT			EXAM	EXAMINER	
			JEN, MINGJEN		
1177 AVENUE OF THE AMERICAS NEW YORK, NY 10036		ART UNIT	PAPER NUMBER		
		3664			
			NOTIFICATION DATE	DELIVERY MODE	
			02/03/2010	EI ECTRONIC	

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

klpatent@kramerlevin.com

## Application No. Applicant(s) 10/566.055 DETLEFS ET AL. Office Action Summary Examiner Art Unit IAN JEN 3664 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 2a) ☐ This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-9 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1-9 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10)⊠ The drawing(s) filed on 25 January 2006 is/are: a)⊠ accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received.

U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06)

Attachment(s)

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date 01/25/2006.

Notice of Draftsperson's Patent Drawing Review (PTO-948)
 Notice of Draftsperson's Patent Drawing Review (PTO-948)
 Notice of Draftsperson's Patent Drawing Review (PTO-948)

Interview Summary (PTO-413)
 Paper No(s)/Mail Date.

6) Other:

5) Notice of Informal Patent Application

#### ETAILED ACTION

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 – 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruehmann et al ( US Pat No 6809831 ) in view of Nemser et al ( US Pat No 5960777 ).

As for claim 1, 8 and 9, Bruchmann et al shows a method for detecting failure of an air consumer circuit in a compressed air system (Col 1, lines 24 - 45), comprising the steps of measuring a variable of state in a compressed air consumer circuits (Col 2, lines 38 - 42; Col 2, lines 63 - Col 3, lines 10 for the state of pressure; Col 3, lines 18 - 20 for the state of energy): comparing at least one of variable of state and when at least one of variable of state and when the state satisfies a preselected circuit failure criterion, shutting off compressed air consumer circuit (Col 6, lines 40 - 46; Col 7, lines 50 - 65); Bruchmann et al is silent regarding a negative gradient of variable of state against a respective threshold value.

Nemser shows a negative gradient of variable of state against a respective threshold value (Col 9, lines 27 – 33 for as for the convention design for pressured air system; Col 9, lines 20 – 45, where the respective threshold value at 30 - 45 psi, shown on Col 9, lines 38.39).

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It would have been obvious for one of ordinary skill in the art to provide the conventional design for pressured air system of Nemser, to Bruehmann, in order to provides a conventional design of the system, for the pressure air system failure measurement of Bruehmann.

As for claim 2, 5, Bruehmann et al shows preselected circuit failure criterion is satisfied when at least one of variable of state below respective threshold value for a time at least one of equal to and greater then a time of at least one of a dynamic change of variable of state and a dynamic collapse of variable of state (Col 6, lines 40 - 46; Col 7, lines 50 - 65; Col 2, lines 38 - 42; Col 2, lines 63 - Col 3, lines 10 for the state of pressure; Col 3, lines 18 - 20 for the state of energy); Bruehmann et al is silent regarding negative gradient.

Nemser shows a negative gradient of variable of state against a respective threshold value ( Col 9, lines 20 – 45, where the respective threshold value at 30 - 45 psi, shown on Col 9, lines 38,39).

It would have been obvious for one of ordinary skill in the art to provide the conventional design for pressured air system of Nemser, to Bruehmann, in order to provides a conventional design of the system, for the pressure air system failure measurement of Bruehmann.

As for claim 3, 6, Bruchmann et al shows threshold value for variable of state corresponds to the value of variable of state to be adjusted in compressed air consumer circuit (
Col 6, lines 40 - 46; Col 7, lines 50 - 65; Col 2, lines 38 - 42; Col 2, lines 63 - Col 3, lines 10 for the state of pressure; Col 3, lines 18 - 20 for the state of energy).

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As for claim 4, Bruehmann et al shows a detection system for a detecting failure of a compressed air consumer circuit in a compressed air system (See Fig 1: Col 1, lines 24 - 45), is including a compressed air supply part having a compressor ( air compressor 11, air supply line 17; see Fig 1), a consumer part having a plurality of compressed air consumer circuits ( See Fig 1, air consumer circuit I-V), and electrically actuatable valves for supplying compressed air to compressed air consumer circuits (See Fig 1, valve 40), the detecting system comprising sensor for monitoring pressure in compressed air consumer circuits (See Fig 1, Pressure sensor 54), an electronic control unit for evaluating electrical signals from sensors and for controlling electrically actuatable values (See Fig 1, 57), electrically actuatable values associated with compressed air consumer circuits being open (See Fig 1, 57), control unit being adapted to compare at least one of a variable of state in individual ones of compressed air consumer circuits ( See Fig 1, 57 )to identify failed ones of compressed air consumer circuits and to switch ones of electrically actuated valves associated with failed ones of compressed air consumer circuits to a closed stated to shut off failed ones of compressed air consumer circuits when at least one of variable of state and negative gradients thereof satisfy a preselected circuit failure criterion ( See Fig 1, 57). Bruehmann et al is silent regarding negative gradient.

Nemser shows a negative gradient of variable of state against a respective threshold value (Col 9, lines 20 – 45, where the respective threshold value at 30 - 45 psi, shown on Col 9, lines 38.39).

It would have been obvious for one of ordinary skill in the art to provide the conventional design for pressured air system of Nemser, to Bruehmann, in order to provides a conventional design of the system, for the pressure air system failure measurement of Bruehmann.

As for claim 7, Bruchmann et al shows electrically actuatable valves are solenoid valves ( Col 9, lines 55 - 56).

#### Conclusion

- The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- Ibarrola (US Pat No 5191956) shows circuitry analyzing using negative gradient.
- Jackson et al (US Pat Pub 2003/0115086) shows consumer circuit analyzing using negative gradient.
- Baruschke et al (US Pat No 5992163) shows air consumer circuit analyze using negative gradient.
- Eberspach et al (US Pat No 6712282; US Pat Pub 2002/0119408).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian Jen whose telephone number is 571-270-3274. The examiner can normally be reached on Monday - Friday 8:00-5:00 (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi Tran can be reached on 571-272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ian Jen/ Examiner, Art Unit 3664 /KHOI TRAN/

Supervisory Patent Examiner, Art Unit 3664